

Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 28th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 108th St., Edmonton, Alberta T5K 2J6.

Utah Water Supply Outlook

and

Federal – State – Private
Cooperative Snow Surveys

Issued by

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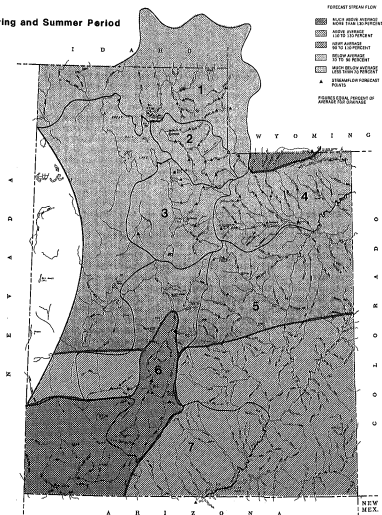
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Streamflow Prospects for Utah

Spring and Summer Period



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- 5 CARBON, EMERY, WAYNE, GRAND & SAN JUAN CO.
- 6 SEVIER & BEAVER RIVER BASINS
- 7 E. GARFIELD, KANE, WASHINGTON & IRON CO.



GENERAL OUTLOOK

SUMMARY

Another month of below average precipitation, coupled with an earlier than normal melt, have resulted in further reductions in streamflow forecasts in northern Utah. The timing of the precipitation in April enabled reservoir operations to delay releases and continue to fill for a few more weeks, however, thereby increasing much needed reserves for later this summer. The southern part of the State received ample precipitation during April and streamflow forecasts remain near average.

SNOWPACK

Changes in snow water content on the watersheds of Utah during April varied significantly from region to region. Northern Utah watersheds began to lose snow water to melt from two to three weeks earlier than usual and lost from two to more than three and one-half times as much water to melt during the month as usual. The Sevier River watershed, in contrast, began melt at the normal time and lost slightly less water to melt than normal and southwestern Utah actually recorded a net increase in water content for the month. May 1 snow water equivalent ranges from 34% of average on the Utah Lake, Jordan River and Tooele Valley watersheds to 88% in southwestern Utah.

PRECIPITATION

April precipitation at mountain stations in northern Utah was generally in the 80 to 90% of average range. Precipitation at northern Utah Valley stations, although erratic, generally ranged from 70 to 100% of average. Seasonal precipitation (October through April) at northern Utah mountain stations is generally 70 to 80% of normal and near 70% at valley sites. Precipitation during April at southern Utah mountain stations ranged from 90 to 180%. Many southern valley stations received more than two times normal April precipitation and, overall, averaged 177%. Seasonal precipitation at southern mountain sites ranges from 90 to 110% of average. Valley stations range from 70 to 130% seasonally.

RESERVOIRS

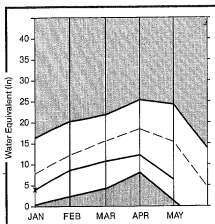
Reserves of water stored in 26 key irrigation reservoirs in Utah are 13% greater than normal for the end of April. This volume represents 86% of capacity. Last year these reservoirs held 88% of capacity in storage at the end of April. Normally the same reservoirs would only be storing 76% of capacity at this time of year. Sixteen of the 26 reservoirs in our sample have more than 90% of their useable capacity in storage. Pineview and the Enterprise Reservoirs will probably not fill this year and shortages will likely materialize. With continued spring precipitation releases could be delayed allowing East Canyon and Porcupine to fill.

STREAMFLOW

Forecasts of spring and summer streamflow on the Bear, Weber, and Provo-Utah Lake-Jordan have been reduced again this month as a result of continued below average monthly precipitation. Forecasts in these basins now range from 20 to 60% of average. Forecast flows on the north slope of the Uintas east of the Bear remain near average. South slope tributaries to the Duchesne have been reduced, however, and now range from 35 to 75% of average. Further south the situation improves with southeastern Utah forecasts in the 55 to 85% range. Forecasts on the Upper Sevier have improved slightly from last month and are near normal as are forecasts on the Virgin.

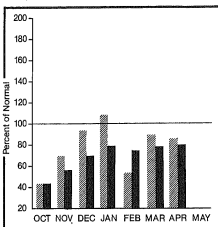
Bear River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations



WATER SUPPLY OUTLOOK:

Snowpack on the Bear River watershed began to melt almost two weeks earlier than usual this year and lost more than twice as much water content to melt during April than is normal. May first snow water content is 44% of average. Mountain precipitation was 86% of average for April which brings total water year accumulation to 78% of average. Streamflow forecasts have declined from last month and now range from 30 to 60% of average. Reservoir storage is slightly less than last year at 103% of average.

For more information contact your local
Soil Conservation Service Office:
Tremonton Field Office 801-257-5403
Logan Field Office 801-753-5616

BEAR RIVER SAGIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST	25 YR.	MOST	MOST	REAS.	REAS.	REAS.	REAS.
	PERIOD	AVG. (1000AF)	PROBABLE (1000AF)	PROBABLE (% AVG.)	MAX. (1000AF)	MAX. (% AVG.)	MIN. (1000AF)	MIN. (% AVG.)
BEAR RIVER near UT-WY Stateline	MAY-JUL	139.0	65.0	42	90.0	66	48.0	38
BEAR near Woodruff	MAY-JUL	124.0	43.0	30	123.0	98	21.0	17
WOODRUFF CREEK near Woodruff	MAY-JUL	15.1	4.7	21	9.0	60	2.0	13
BIG CREEK near Randolph	APR-JUL	9.3	1.3	29	4.0	75	1.0	19
BEAR RIVER near Randolph	MAY-JUL	96.0	29.0	21	73.0	77	15.0	16
SMITH FORK near Border	APR-SEP	123.0	44.0	36	125.0	102	20.0	16
THIRAS FORK near Stateline	APR-SEP	37.0	15.0	42	33.0	89	5.0	14
BEAR RIVER near Harar	APR-SEP	310.0	139.0	45	256.0	83	60.0	19
CUB RIVER near Freeboe	APR-JUL	44.8	23.8	50	40.0	56	10.0	20
LITTLE BEAR RIVER near Paradise	MAY-JUN	29.0	9.3	32	20.0	69	6.0	21
LOGAN RIVER near Logan	MAY-JUL	107.0	61.0	48	70.0	65	32.0	30
BLACKSMITH FORK near Byron	MAY-JUL	36.0	11.9	31	22.0	63	6.0	16

RESERVOIR STORAGE		(1000AF)			INTERPRETED GROUNDWATER ANALYSIS			
RESERVOIR	USABLE CAPACITY	** THIS YEAR	USABLE STORAGE LAST YEAR	** AVE.	WATERSHED	NO. COURSES AVO'D	THIS YEAR AS % OF LAST YR. AVERAGE	
BEAR LAKE	1421.0	1096.0	1110.9	1099.0	BEAR RIVER, UPPER IN UTAH	6	100	42
HYDUN	15.3	15.3	15.4	15.2	BEAR RIVER, LOWER IN UTAH	10	186	43
PORCUPINE	11.3	7.2	11.3	9.8	BEAR R. DRAINAGE IN UTAH	15	143	43
MOODRUFF ANGEONS	55.9	95.4	97.8	---	BEAR RIVER, UPPER	12	194	46
MOODRUFF CREEK	3.5	3.5	---	---	BEAR RIVER, LOWER	13	210	39
					BEAR RIVER DRAINAGE	23	164	44
					LOGAN RIVER	5	252	45
					KNIF RIVER	0	0	2
					BEAR RIVER BASIN	25	197	44

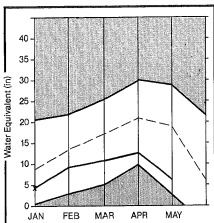
1 - Regs. max. and reg. min. forecasts are for 60% and 90% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

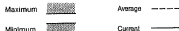
The average is computed for the 1961-65 base period.

Weber & Ogden Watersheds

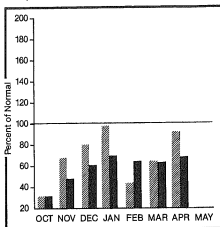
Mountain snowpack* (Inches)



*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations



WATER SUPPLY OUTLOOK:

Snow water equivalent on the Weber River watershed is only 35% of normal. Peak accumulation was reached more than two weeks earlier than usual and melt during April was more than twice normal. Mountain precipitation during April continued the unbroken string of below average months of precipitation this water year with 92% of average. Water year total precipitation is 68% of normal. Streamflow forecasts now range from 20 to 51% of average. Reservoirs are holding 80% of capacity but Pineview is only 52%.

For more information contact your local
Soil Conservation Service Office:
Layton Sub Office 801-544-9144

WEBER & OGDEN WATERSHEDS In Utah

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	HOIST PROBABLE (1000AF)	HOIST PROBABLE (X AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (X AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (X AVG.)
SMITH AND MOORHOUSE CREEK near Oaki	MAY-JUN	27.7	15.3	49	38.0	65	9.0	32
WEBER RIVER near Oakley	MAY-JUN	93.0	40.0	49	85.0	69	25.0	27
ROCKPORT RESERVOIR Inflow	MAY-JUN	102.0	24.0	25	80.0	49	14.0	14
CHALK CREEK near Coalville	MAY-JUN	94.0	4.8	29	17.0	50	4.0	12
WEBER RIVER near Coalville	MAY-JUN	105.0	25.0	24	49.0	47	15.0	14
ECHO RESERVOIR Inflow	MAY-JUN	120.0	27.0	21	84.0	44	14.0	11
LOST CREEK near Croyden	MAY-JUN	11.2	3.1	23	6.0	54	2.0	18
EAST CANYON CREEK near Morgan	MAY-JUN	19.0	4.5	24	12.0	63	2.0	11
HARDSCRABLE CREEK near Forterville	APR-JUN	18.4	7.0	31	14.0	87	5.0	27
WEBER RIVER at Gateway	APR-JUN	325.0	84.0	25	144.0	45	44.0	13
SOUTH FORK OGDEN RIVER near Huntsville	MAY-JUN	45.0	9.0	21	21.0	49	5.0	12
PINEVIEW RESERVOIR Inflow	MAY-JUN	74.0	21.0	28	36.0	49	12.0	14
WHEELER CREEK near Huntsville	APR-JUN	4.0	2.8	37	4.0	64	1.0	16
FARMINGTON CREEK near Farmington	MAY-JUL	4.7	2.0	30	5.0	75	1.0	18

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	AVG.	WATERSHED	NO. COURSES AVE'D	THIS YEAR AS % OF LAST YR. AVERAGE	
DAIBEY	7.1	5.8	7.1	2.3	ODDEN RIVER	4	118 37	
EAST CANYON	48.1	40.1	44.1	41.3	WEBER RIVER	16	99 34	
ECHO	73.9	69.5	70.7	54.2	WEBER & OGDEN WATERSHEDS	20	104 30	
LOST CREEK	20.0	19.4	19.0	14.9				
PINEVIEW	110.1	87.8	67.7	75.5				
ROCKPORT	60.9	47.8	40.1	34.8				
MILLARD BAY	165.5	135.3	142.1	135.7				

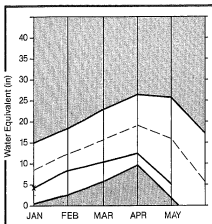
1 - Max, min, and reas. min. forecasts are for 50 and 90% exceedence levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

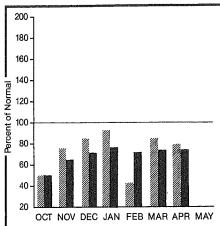
Utah Lake, Jordan River & Tooele Valley

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum  Average 
Minimum  Current 

Monthly precipitation  Year to date precipitation 

WATER SUPPLY OUTLOOK:

Loss of snow water to melt on Jordan River and Tooele Valley tributaries began approximately two weeks earlier than usual this year and progressed at more than twice the normal rate resulting in May first water content of only 34% of average. Precipitation at mountain stations was only 78% of average in April. Seasonal precipitation is 74% of average. Forecasts of spring and summer streamflow now range from 38 to 55% of average. Area reservoirs have 97% of their cumulative capacity currently in storage.

For more information contact your local
Soil Conservation Service Office:
Midvale Field Office 801-524-4373
Provo Field Office 801-377-5580

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	20 YR. AVE. (1000CFS)	MOST PROBABLE (1000CFS)	MOST PROBABLE (2 AVE.)	REAR. MAX. (1000CFS)	REAR. MAX. (2 AVE.)	REAR. MIN. (1000CFS)	REAR. MIN. (2 AVE.)
SALT CREEK near Nephi	MAY-JUL	15.8	4.1	38	10.0	93	2.0	19
PARSON CREEK near Payson	MAY-JUL	5.8	2.3	43				
HOBBS CREEK near Springville	MAY-JUL	16.8	7.0	42				
PROVO near Hallston	MAY-JUL	100.0	80.0	30	70.0	70	35.0	35
PROVO below Deer Creek Dam	MAY-JUL	108.0	80.0	44	75.0	69	25.0	23
AMERICAN FORK near American Fk.	MAY-JUL	30.0	14.0	47	18.0	60	11.0	37
UTAH LAKE Inflow	MAY-JUL	211.0	100.0	32	175.0	83	45.0	21
LITTLE COTTONWOOD CRK near SLC	MAY-JUL	38.0	18.0	47	21.0	55	14.0	42
BIG COTTONWOOD CRK near SLC	MAY-JUL	35.0	18.0	51	21.0	60	14.0	48
PARLEY'S CREEK near SLC	MAY-JUL	13.0	9.2	40	9.0	69	2.0	15
MILL CREEK near SLC	MAY-JUL	5.9	3.0	51	4.0	68	2.0	34
EMIGRATION CREEK near SLC	MAY-JUL	3.2	1.1	38				
CITY CREEK near SLC	MAY-JUL	7.8	3.0	38	4.0	51	2.0	26
VERNON CREEK near Vernon	MAY-JUN	0.8	0.4	35	0.8	101	0.2	25
SETTLEMENT CREEK near Tooele	MAY-JUL	2.1	0.9	43	2.0	95	0.8	24
SOUTH MILLON CREEK near Grantsville	MAY-JUL	2.7	1.1	41	2.0	74	0.6	22

RESERVOIR STORAGE		(1000CFS)	WATERSHED SNOWPACK ANALYSIS				
RESERVOIR	USEABLE CAPACITY	THIS YEAR	USEABLE STORAGE LAST YEAR	WATERSHED	NO. COURSES AVE'S	THIS YEAR AS % OF LAST YR.	% OF AVERAGE
DEER CREEK	147.6	189.8	144.1	PROVO RIVER & UTAH LAKE	10	109	91
GRANTSVILLE	3.3	3.1	3.2	PROVO RIVER	5	91	23
SETTLEMENT CREEK	1.0	1.0	0.8	JORDAN RIVER & GREAT SALT	12	104	34
STRAWBERRY-ENLARGED	951.4	495.6	552.8	TOOELE & VERNON N.B.'S	4	100	90
UTAH LAKE	855.5	855.5	849.5	UTAH L.-JORDAN R.-TOOELE	26	102	54
VERNON CREEK	0.6	0.4	0.4				

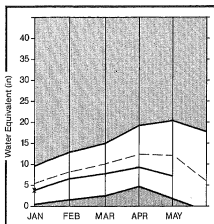
1 - Reas. max. and min. forecasts are for 85 and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-80 base period.

Uintah Basin & Dagget SCD's

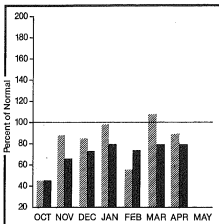
Mountain snowpack* (inches)



*Based on selected stations

Maximum  Average 
Minimum  Current 

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation  Year to date precipitation 

WATER SUPPLY OUTLOOK:

Snowmelt commenced from one to three weeks earlier than usual on Uinta Mountain watersheds that drain into the Colorado River basin. During April more than three and one-half times normal amounts of snow water were lost to melt. May first snowpack ranges from 18 to 81% of average. Mountain precipitation was 69% of the April average bringing seasonal totals to 76%. Forecasts range for 34 to 102% of average streamflow. Reservoir storage is currently 142% of average and 94% of capacity.

For more information contact your local
Soil Conservation Service Office:
Roosevelt Field Office 801-722-4621

UTAH BASIN & DABET SCD'S

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVE. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVE.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVE.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVE.)
BLACK'S FORK near Millbarne	APR-JUL	90.0	90.0	90	105.0	117	60.0	67
HENRY'S FORK near Manila	APR-SEP	81.0	82.0	100	65.0	127	40.0	79
FLAMING GORGE RESERVOIR Inflow	APR-JUL MAY-JUL	1247.0 1094.0	888.0 725.0	67 66	1980.0 920.0	85 84	645.0 550.0	51 50
ASHLEY CREEK near Vernal	MAY-JUL	50.0	30.0	60	40.0	80	20.0	40
WEST FORK DUCHENE RIVER near Hann	APR-JUL	28.0	15.0	55	20.0	71	11.0	39
DUCHENE RIVER near Tablona	MAY-JUL	95.0	44.0	46	55.0	60	34.0	35
ROCK CREEK near Mountain Home	MAY-JUL	90.0	32.0	35	66.0	73	41.0	45
DUCHENE RIVER near Duchesne	APR-JUL MAY-JUL	189.0 175.0	105.0 80.0	56 47	130.0 110.0	69 60	80.0 60.0	42 34
CURRENT CREEK near Fruitland	MAY-JUL	16.0	8.0	49	11.0	66	6.0	36
STRAWBERRY RESERVOIR Inflow	APR-JUL MAY-JUL	60.0 55.0	27.0 17.0	45 34	35.0 27.0	63 54	16.0 9.0	27 16
STRAWBERRY RIVER at Duchesne	APR-JUL	69.0	32.0	46	42.0	61	23.0	33
LAKEFORK RIVER near Mountain Home	MAY-JUL	67.0	31.0	74	62.0	93	41.0	61
YELLOWSTONE RIVER near Altosh	MAY-JUL	62.0	44.0	71	61.0	96	27.0	44
DUCHENE near Myton	MAY-JUL	186.0	82.0	44	130.0	70	26.0	14
UTAH RIVER near Nooka	MAY-JUL	84.0	41.0	79	93.0	111	29.0	35
WHITE ROCKS RIVER near White Rocks	MAY-JUL	87.0	40.0	70	67.0	100	23.0	40
DUCHENE near Randlett	APR-JUL MAY-JUL	227.0 220.0	130.0 100.0	53 45	200.0 220.0	78 95	40.0 55.0	16 24

RESERVOIR STORAGE

(1000AF)

WATERBUD SHORPACK ANALYSIS

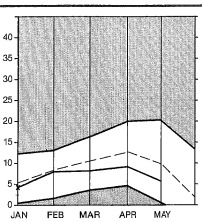
RESERVOIR	USABLE	** USABLE STORAGE **		WATERBOD	NO. COURSES AFD	THIS YEAR AS % OF		
	CAPACITY	THIS YEAR	LAST YEAR			AVERAGE	LAST YR.	AVERAGE
FLAMING GORGE	3749.0	3070.0	3136.9	---	UPPER GREEN RIVER in UTAH	13	73	64
MOON LAKE	35.8	23.6	27.4	10.1	ASHLEY CREEK	2	40	18
RED FLEET	26.0	22.5	20.8	---	BLACK'S FORK RIVER	3	113	81
STEINWAD	33.3	32.0	37.3	21.0	SHEEP CREEK	2	67	69
STARVATION	163.3	144.1	162.9	113.5	DUCHENE RIVER	16	77	50
STRAWBERRY-ENLARGED	951.4	475.6	551.9	---	LAKE FORK-YELLOWSTONE CX.	3	53	50
					STRAWBERRY RIVER	4	113	40
					UTAH-MILITARY RIVERS	4	67	52
					UTAH BASIN & DABNET SCD	29	94	56

1 - Reas. max. and min. alt. forecasts are for 65 and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-66 base period.

Carbon, Emery, Wayne, Grand, and San Juan Co.

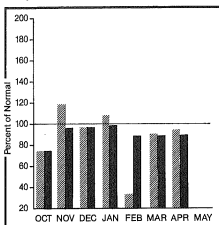
Mountain snowpack* (inches)



*Based on selected stations

Maximum (stippled area)
Average (dashed line)
Current (solid line)

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation (stippled bar)
Year to date precipitation (solid bar)

WATER SUPPLY OUTLOOK:

The watersheds of southeastern Utah began to lose snow water to melt about two weeks earlier than usual this year but the amount lost in April was only slightly in excess of normal. May first snow water content is 60% of average. April precipitation at mountain stations was near normal bringing water year accumulation to 89% of average. Forecasts of spring and summer streamflow range from 55 to 85% of normal. Stored water reserves were 13% greater than usual at the end of April.

For more information contact your local
Soil Conservation Service Office:
Price Field Office 801-637-0041

CARSON, EMERY, WAYNE, GRAND, & SAN JUAN CO.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (1X AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (1X AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (1X AVG.)
COLORADO near Cloce, UT	APR-JUL MAY-JUL	2443.0 2599.0	2700.0 2304.0	78 78	3525.0 3045.0	102 102	1975.0 1695.0	57 57
MILL CREEK near Moab	MAY-JUL	4.7	4.0	88	5.0	104	3.0	64
GREEN near Green Riv., UT	APR-JUL MAY-JUL	3182.0 2899.0	2490.0 2540.0	77 78	3005.0 2535.0	94 98	1845.0 1545.0	55 59
GOOSEBERRY CREEK near Scofield	MAY-JUL	11.1	7.4	67	10.0	99	5.0	45
SCOFIELD RESERVOIR Inflow	MAY-JUL	41.3	23.0	88	38.0	72	18.0	43
PRICE near Heiler	MAY-JUL	75.0	43.0	61				
ELECTRIC LAKE Inflow	MAY-JUL	12.5	8.8	61	11.0	79	7.0	50
HUNTINGTON CREEK near Huntington	MAY-JUL	48.9	55.0	41	40.0	52	25.0	51
COTTONWOOD CREEK near Orangeville	MAY-JUL	43.0	24.0	40	40.0	93	15.0	35
FERRON CREEK near Ferron	MAY-JUL	56.0	22.0	88	30.0	79	15.0	39
BEVEN MILE CREEK near Fish Lake	APR-JUL	6.2	5.4	83	7.0	106	4.0	42
MUDDY CREEK near Emery	APR-JUL	21.0	11.0	57	16.0	74	5.0	38
NAVAJO RESERVOIR Inflow	MAY-JUL	406.0	439.0	72	610.0	101	295.0	49
SAN JUAN near Bluff, UT	MAY-JUL	871.0	695.0	80	945.0	111	475.0	55

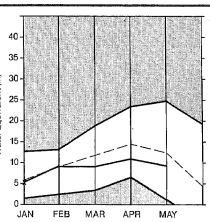
RESERVOIR STORAGE (1000AF)				WATERSHED BOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **		WATERSHED	NO. COURSES AVE'D	THIS YEAR AS % OF LAST YR. AVERAGE
		THIS YEAR	LAST YEAR			
HUNTINGTON NORTH	3.9	4.2	4.1	PRICE RIVER	3	290 56
JOE'S VALLEY	61.6	44.8	48.2	EMERSON RIVER	7	124 48
KEN'S LAKE	2.3	1.4	1.0	MUDDY RIVER	2	399 43
MILL SITE	14.7	9.4	14.8	FREMONT RIVER	4	96 90
SCOFIELD	45.6	47.7	47.9	LAGAS MOUNTAINS	2	62 49
				BLUE MOUNTAINS	2	35 24
				MILLION CREEK - WHITE RIVE	3	136 16
				SOUTHEASTERN UTAH	22	113 60

1 - Reas. max. and min. forecasts are for 50% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage. The average is computed for the 1961-85 base period.

Sevier & Beaver River Basins

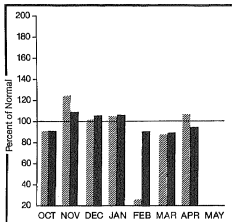
Mountain snowpack* (inches)



*Based on selected stations

Maximum ———
Average ———
Minimum ———
Current ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation ———
Year to date precipitation ———

WATER SUPPLY OUTLOOK:

Snowpack on Sevier River watershed began to melt at the normal time this April but the amount of water lost to melt was less than average because of low temperatures and above average precipitation the last half of the month. May first snow water content is 73% of normal. April precipitation was 106% of average. Water year total is 92% of normal. Streamflow forecasts range from 43 to 110% of average and generally increase from north to south. Reservoir storage is very good. Storage is 158% of average (97% of capacity).

For more information contact your local
Soil Conservation Service Office:
Richfield Field Office 801-896-6261
Fillmore Field Office 801-743-6655

SEVIER & BEAVER RIVER BASINS

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (1% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (1% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (1% AVG.)
SEVIER at Hatch	MAY-JUL	44.9	46.0	102	66.0	134	35.0	78
SEVIER near Circleville	MAY-JUL	26.2	40.0	110				
SEVIER near Kingston	MAY-JUL	25.7	29.0	109	45.0	170	15.0	66
ANTHONY CREEK near Anthony	MAY-JUL	6.9	7.2	194				
E F SEVIER near Kingston	MAY-JUL	14.4	18.0	113	25.0	171	11.0	67
SEVIER b/w Plate Dam	MAY-JUL	42.3	49.0	114	76.0	186	23.0	65
CLEAR CREEK near Sevier	MAY-JUL	18.9	19.0	97				
BOURN to GUNNISON	MAY-JUL	26.4	34.0	99	70.0	192	16.0	44
KINGSTON to VERMILLION DAM	MAY-JUN	20.7	30.0	92				
VERMILLION DAM to GUNNISON	MAY-JUN	24.2	34.0	100				
	MAY-JUL	28.0	36.0	100				
SALINA CREEK at Salina	MAY-JUN	16.2	8.9	49				
PLEASANT CREEK near Pleasant	MAY-JUL	11.4	3.9	42				
EPHRAIM CREEK near Ephraim	MAY-JUL	22.0	10.0	48				
SEVIER at Gunnison	MAY-JUL	79.4	70.0	88				
CHICKEN CREEK near Levan	APR-JUL	3.6	1.9	34	3.0	86	1.0	29
OAK CREEK near Oak City	MAY-JUL	1.1	0.9	40	1.0	91	0.3	27
CHALK CREEK near Fillmore	MAY-JUL	10.8	9.2	70	12.0	91	6.0	48
BEAVER RIVER near Sevier	MAY-JUL	24.0	18.0	78	26.0	100	10.0	42
NORTH CREEK near Sevier (combined)	MAY-JUL	12.7	10.8	83	18.0	142	3.0	24
MINERSVILLE RESERVOIR Inflow	APR-JUN	6.8	6.8	71	10.0	112	3.0	34

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE			WATERSHED	NO. COURSES	THIS YEAR AS % OF
	THIS YEAR	LAST YEAR	AVG.	AVERAGE		LAST YR.	AVERAGE
GUNNISON	20.3	20.3	20.3	14.9	U SEVIER is at Richfield	11	127
MINERSVILLE (July 01)	24.0	22.9	24.9	14.4	EAST FORK SEVIER RIVER	4	118
OTTER CREEK	82.7	82.7	82.0	99.8	SOUTH FORK SEVIER RIVER	7	101
PLATE	71.8	71.1	69.9	94.7	LOWER SEVIER RIVER	12	127
SEVIER BRIDGE	236.0	227.4	211.1	130.0	BEAVER RIVER	3	140
PANQUITCH LAKE	82.3	81.0	80.9	---	SEVIER & BEAVER R. BASINS	26	107

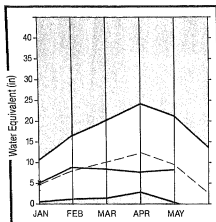
1 - Reas. max. and min. forecasts are for 95 and 99% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-95 base period.

E. Garfield, Kane, Washington, & Iron Co.

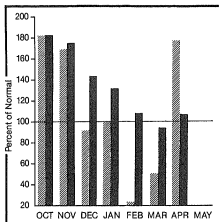
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Normally the watersheds in southwestern Utah lose about three inches of snow water content in April. This April an increase of six-tenths of an inch was recorded, reversing the melt trend that began in February and bringing May first snow water to 88% of average. Mountain precipitation was abundant at most stations. April precipitation was 177% of average. Water year precipitation is 107% of average. Local flows are forecast above average. Reservoir storage is near capacity except at Enterprise (30% of cap.).

For more information contact your local
Soil Conservation Service Office:
Cedar City Field Office 801-586-2429

E. BARFIELD, KANE, WASHINGTON, & IRON Co.

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. ANL. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (1% AVE.)	FEAR. MAX. (1000AF)	REAS. MIN. (1% AVE.)	REAS. MDL. (1000AF)	FEAR. MIN. (1% AVE.)
LAKE POWELL Inflow	APR-JUL MAY-JUL	6646.0 7029.0	6300.0 6300.0	70 70	8950.0 6920.0	101 98	4670.0 3820.0	87 84
VIRGIN near Hurricane	MAY-JUN	43.8	80.0	114	70.0	160	30.0	68
SANTA CLARA near Pine Valley	MAY-JUN	4.0	4.0	103				
COAL CREEK near Cedar City	MAY-JUL	16.8	18.0	107	26.0	149	15.0	89

RESERVOIR STORAGE (1000AF)				WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** THIS YEAR	USEABLE STORAGE ** LAST YEAR AVE.	WATERSHED	NO. COURSES AVE '0	THIS YEAR AS % OF LAST YR. AVERAGE	
GUNLOCK	10.4	10.8	7.0 ---	VIRGIN RIVER	5	143	87
LAKE POWELL	25002.0	0.0	0.0 ---	PIRONMAN	4	144	98
QUAIL CREEK	40.0	38.0	32.0 ---	ENTERPRISE TO MEN HANCOCK	2	0	0
UPPER ENTERPRISE	10.0	2.8	3.0 ---	COAL CREEK	3	123	84
LOWER ENTERPRISE	2.6	1.0	0.6 ---	ERICKLANT RIVER	2	84	80
				SOUTHWESTERN UTAH	12	143	86

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also 12% below.

2 - Corrected for upstream diversions or changes in reservoir storage.

The average is computed for the 1961-85 base period.

SNOW MEASUREMENT DATA

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
ALTA CENTRAL	8800	5/04	43	19.5	11.3	40.3
ASHLEY TWIN LAKES	10500	5/03	28	6.2	11.1	18.0
ATWOOD LAKE	10500	5/03	20	5.8	8.6	13.3
BEAVER CREEK DIVIDE	8280	4/27	0	0.0	0.0	6.5
BEAVER DAMS	8000	4/26	0	0.0	0.0	8.0
BEN LOMOND PEAK	8000	4/28	40	18.6	18.4	39.4
BEN LOMOND TRAIL	6000	4/28	0	.0	0.0	9.6
BEVAN'S CABIN	6450	4/29	0	.0	0.0	5.5
BIG FLAT	10290	4/26	61	19.6	14.9	21.6
BIRCH CROSSING	8100	4/25	0	0.0	0.0	2.0
BLACK'S FLAT-U.M. CK	9400	4/26	20	6.3	3.5	9.4
BLACK'S FORK	9200	4/26	-	9.0E	0.0	11.9
BLACK'S FORK GS-EF	9340	4/27	25	7.7	6.8	9.9
BLACK'S FORK JUNCTN	8930	4/27	19	5.4	2.7	8.3
BOX CREEK	9300	4/26	37	11.8	6.2	13.2
BRIAN HEAD	10000	4/25	69	23.8	20.0	22.0
BRIGHTON	8750	5/04	31	12.9	11.8	40.2
BRIGHTON CABIN	8700	5/04	19	8.9	8.7	25.5
BROWN DUCK RIDGE	10600	4/27	45	12.5	19.0	22.4
BRUCE CANYON	8000	4/28	0	0.0	0.0	0.6
BUCK FLAT	9800	4/26	34	11.8	9.6	17.2
BUCK PASTURE	9700	5/03	42	19.0	9.2	17.2
BUCKBOARD FLAT	9000	4/28	9	3.4	8.0	8.3
BUG LAKE	7950	4/28	26	9.9	8.0	19.4
BURT'S-MILLER RANCH	7900	4/27	0	0.0	0.0	2.4
CAMP JACKSON	8600	4/26	1	0.4	3.0	7.5
CASTLE VALLEY	9580	4/25	24	8.0	5.9	8.5
CHALK CREEK #1	9100	4/27	39	13.2	15.2	25.0
CHALK CREEK #2	8200	4/27	20	6.1	6.6	14.4
CHALK CREEK #3	7500	4/27	0	0.0	0.0	3.1
CHEPETA	10300	4/27	16	4.2	10.1	13.9
CHEPETA-WHITERKS. LK	10350	5/03	39	11.7	13.5	15.7
CITY CREEK	7500	5/03	9	4.2	0.0	23.2
CLEAR CREEK MEADOWS	9420				-	20.6
CLEAR CREEK RIDGE #1	9200	4/27	24	9.7	6.1	16.0
CLEAR CREEK RIDGE #2	8000	4/27	15	5.3	2.9	10.8
CLEAR CREEK RIDGE #3	8600	4/27	0	0.0	0.0	0.1
CURRENT CREEK	8000	4/27	0	0.0	0.0	2.8
DANIELS-STRAWBERRY	8000	4/27	1	0.3	0.0	9.9
DESERET PEAK	9250	4/29	27	9.8	-	26.9
DILL'S CAMP	9200	4/26	14	4.5	3.8	9.4
DONKEY RESERVOIR	9800	4/26	12	3.2	8.1	5.5
DRY BREAD POND	8350	4/26	13	5.1	1.0	18.2
DUCK CREEK R.S.	8700	4/25	-	2.1E	0.0	9.2
EAST SHINGLE LAKE	9800	5/03	51	15.8	12.2	28.9
EAST WILLOW CREEK	8250	5/01	-	0.0E	1.0	7.2
FARMINGTON CANYON	8000	4/26	26	11.0	17.1	33.7
FARMINGTON CANYON L.	6950	4/28	16	6.1	10.4	23.7
FARNSWORTH LAKE	9600	4/26	57	21.1	19.9	22.9

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
FISH LAKE	8700	4/26	10	3.2	1.7	5.9
FIVE POINT LAKE	11000	5/03	36	10.8	13.1	18.4
FRANCES FLATS	6700	5/03	0	0.0	0.0	0.7
G.B.R.C. HEADQUARTER	8700	4/26	33	11.9	10.9	17.6
G.B.R.C. MEADOWS	10000	4/26	58	20.0	19.4	27.2
GARDEN CITY SUMMIT	7600	4/28	19	7.5	4.2	17.2
GEORGE CREEK	8840				-	-
GOOSEBERRY R.S.	8000	4/26	17	6.3	5.4	10.0
HARDSCRABBLE	6700	4/28	0	0.0	0.0	11.1
HARRIS FLAT	7700	4/25	3	1.2	0.0	2.9
HAYDEN FORK	9400	4/27	21	8.1	8.5	16.1
HENRY'S FORK	10000	5/03	34	10.9	11.2	13.4
HEWINTA G.S.	9500	4/27	25	8.7	7.1	10.2
HIDDEN SPRINGS	5500	5/03	0	0.0	0.0	0.4
HOLE-IN-THE-ROCK	9150	4/27	13	3.5	4.0	6.0
HOLE-IN-THE-ROCK GS	8300				-	0.0
HICKERSON PARK	9100	4/27	19	6.3	6.0	6.5
HOBBLE CREEK SUMMIT	7420	4/27	0	0.0	0.0	8.3
HORSE RIDGE	8260	4/28	11	4.0	2.9	20.0
HUNTINGTON-HORSESHOE	9800	4/26	55	20.8	16.1	27.4
INDIAN CANYON	9100	4/27	19	6.2	7.2	10.9
JOHNSON VALLEY	8850	4/26	0	0.0	0.0	4.6
KILFOIL CREEK	7300	4/28	5	1.6	5.6	10.7
KILLYON CANYON	6300	5/03	0	0.0	0.0	0.0
KIMBERLY MINE (UPPER)	9300	4/26	36	13.9	13.4	17.2
KING'S CABIN (UPPER)	8730	4/28	3	0.8	4.0	9.8
KLONDIKE NARROWS	7400	4/26	9	3.7	0.0	15.8
KOLOB-CRYSTAL	9250	4/25	58	20.2	11.6	21.6
LAKEFORK BASIN	11100	5/03	45	12.6	15.0	22.4
LAKEFORK MOUNTAIN #1	10200	4/27	19	5.7	10.1	12.1
LAKEFORK MOUNTAIN #3	8400	4/27	0	0.0	0.0	2.0
LAMBS CANYON	7400	4/27	7	2.5	0.0	11.0
LASAL MOUNTAIN LOWER	8800	4/29	1	0.6	4.4	5.3
LASAL MOUNTAIN (UPP)	9850	4/29	33	13.0	17.6	14.4
LIGHTNING LAKE	10500	5/03	48	13.4	21.0	25.8
LILY LAKE	9050	4/27	17	4.6	5.6	14.2
LITTLE BEAR (LOWER)	6000	4/28	0	0.0	0.0	1.9
LITTLE BEAR (UPPER)	6550	4/28	0	0.0	0.0	5.6
LITTLE GRASSY CREEK	6100	4/25	0	0.0	0.0	0.1
LONG FLAT	8000	4/25	0	0.0	0.0	2.0
LONG VALLEY JCT.	7500	4/25	2	0.7	0.0	0.0
LOST CREEK RESERVOIR	6130	4/28	0	0.0	0.0	0.0
MAMMOTH-COTTONWOOD	8800	4/26	32	13.2	6.9	20.9
MERCHANT VALLEY (UP)	6750	4/26	22	6.9	2.7	7.9
MIDDLE BEAVER CREEK	8650				-	4.0
MIDDLE CANYON	7000	4/29	0	0.0	0.0	10.0
MIDWAY VALLEY	9800	4/25	68	23.0	18.4	24.1
MILL CREEK	6950	4/26	25	10.0	6.6	20.6
MILL D SOUTH FORK	7400	4/27	8	2.8	0.0	15.4

SNOW MEASUREMENT DATA (cont.)

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
MONTE CRISTO R.S.	8960	4/28	32	12.9	9.8	26.5
MOSBY MOUNTAIN (LOW)	9500	4/28	16	4.0	7.5	10.5
MT. BALDY R.S.	9500	4/26	58	20.9	16.6	26.2
MUD CREEK #2	8600	4/26	14	4.8	2.6	8.9
OAK CREEK	7760	4/25	19	6.0	2.8	9.5
ONE MILE SUMMIT	7330				-	0.0
OTTER LAKE	9600	4/28	36	11.9	8.9	14.5
PANQUITCH LAKE	8200	4/25	2	0.5	0.0	1.3
PARADISE PARK	10100	4/28	25	9.0	12.0	15.2
PARLEY'S CANYON SUM.	7500	4/28	11	3.7	1.6	14.2
PAYSON R.S.	8050	4/27	18	7.2	8.2	16.3
PICKLE KEG SPRING	9600	4/26	29	11.9	9.4	15.8
PINE CANYON	8000	4/28	7	1.6	2.6	14.8
PINE CREEK	8800	4/25	32	13.0	8.7	15.5
REDDEN MINE LOWER	8500	4/27	25	9.5	4.2	17.9
RED PINE RIDGE	9200	4/26	30	11.4	7.6	15.9
REES'S FLAT	7300	4/25	8	2.7	0.1	11.0
REYNOLDS PARK	10400	5/03	43	12.9	12.2	18.0
ROCK CREEK	7900	4/27	0	0.0	0.0	1.4
ROCKY BASIN-SETTLEMENT	8900	4/29	40	15.2	14.1	30.0
SEELEY CREEK R.S.	10000	4/26	45	15.5	15.3	19.0
SERGEANT LAKES	8300	5/03	19	5.7	0.0	11.7
SHINGLE MILL	6200	4/28	0	0.0	0.0	3.3
SILVER LAKE (BRIGHT.)	8730	4/27	32	14.2	10.6	28.2
SMITH & MOREHOUSE	7800	4/27	3	0.8	0.3	9.2
SNOWBIRD GAD VALLEY	9700				30.2	40.0
SOAPSTONE R.S.	7800	4/27	-	0.0E	0.0	7.2
SPIRIT LAKE	10300	4/27	29	9.2	16.4	15.9
SQUAW SPRINGS	9300	4/26	0	0.0	0.0	4.9
STEEL CREEK PARK	10100	4/27	51	17.0	16.6	19.0
STILLWATER CAMP	8550	4/27	6	1.8	2.1	8.4
STRAWBERRY DIVIDE	8400	4/29	20	8.8	0.0	14.9
STUART R.S.	7950	4/26	0	0.0	0.0	2.3
SUSC RANCH	8200	4/27	0	0.0	0.0	2.7
TALL POLES	8800	4/25	35	11.7	4.9	12.7
THAYNES CANYON	9200				-	-
THISTLE FLAT	8500				-	17.5
TIMPANOGOS DIVIDE	8140	4/27	12	4.5	5.1	23.0
TONY GROVE LAKE	8400	4/26	47	21.3	9.1	35.8
TONY GROVE R.S.	6250	4/28	0	0.0	0.0	3.8
TRIAL LAKE	9960	4/27	41	12.3	13.7	26.6
TROUT CREEK	9400	4/28	12	2.8	5.1	10.1
UPPER JOES VALLEY	8900	4/26	7	1.9	0.1	6.6
VERNON CREEK	7500	4/28	0	0.0	0.0	5.1
VIPONT	7670				-	8.0
WEBSTER FLAT	9200	4/25	35	11.6	9.7	16.3
WHITE RIVER #1	8550	4/27	19	6.6	1.3	10.6
WHITE RIVER #3	7400	4/27	0	0.0	0.0	0.8
WIDTSOE-ESCALANTE #3	9500	4/26	34	9.6	12.0	10.5
WRIGLEY CREEK	9000	4/26	14	4.6	3.5	9.0
YANKEE RESERVOIR	8700	4/25	20	7.5	5.0	7.3



United States
Department of
Agriculture

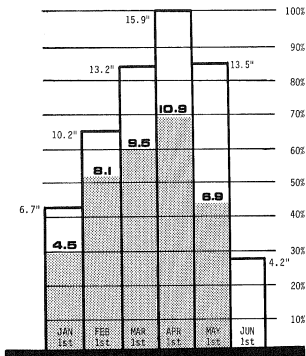
**Soil
Conservation
Service**

Salt Lake City,
Utah



Utah Snowpack Progress

1988



Statewide

NOTE:

Snow water equivalent in inches is compared to the highest seasonal amount (100%). Monthly averages are accumulated by basin/state.

Averages are for the period 1961-1985.

May 1, 1988



05/01/87



05/01/88

05/01 AVERAGE

W A T E R C O N T E N T I N C H E S

20
18
16
14
12
10
8
6
4
2
0

15.9

17.5

5.1

3.9

15.9

7.2

8.6

12.2

5.9

5.5

10.0

9.1

7.0

12.7

8.3

5.8

9.5

6.9

6.1

13.5

BEAR

WEBER

UTAH LAKE

UINTAH

CARBON

SEVIER

GARFIELD

STATEWIDE



WATER CONSERVATION

TIPS

FOR STRETCHING IRRIGATION WATER

OTHER PLACES FOR INFORMATION OR ASSISTANCE

Check with local ASCS office for possible special practices or cost-sharing that might assist with major irrigation changes on your farm this year.

Maintain contact with Farmers Home Administration for special local programs or disaster loans available.

Maintain contact with the local Cooperative Extension Service office for agricultural and marketing conditions.

If you belong to an irrigation district, contact irrigation officials throughout the season to learn about current water availability and water supply forecasts.

Consult commercial irrigation equipment suppliers for system efficiency ideas.

Check with your local Soil Conservation Service office and Conservation District officials for details concerning your soil and water conservation problems.



Stretch Your Irrigation Water

Soil can absorb irrigation water only at a given rate, which varies for each soil type. Water requirements vary for different crops. Make sure you apply water to your crop only when needed. Check soil moisture by space, probe, or soil moisture meter, and make careful visual checks of your crops.

If you have a conservation plan on your farm, or if the soil in your area has been mapped, the Soil Conservation Service can cross-check soil type and irrigation data and provide you with the water holding capacity of your soil for a given crop.

Don't know if your soil has been mapped? Check with the local SCS office. Even if the soil has not been mapped, the SCS can supply you with general information.

Water stretching measures are important to most farmers in the West. To use your available water in the most productive way possible, here's a checklist to help you analyze your irrigation system.

IRRIGATION SYSTEMS

Inspect your system *before* water starts to flow.

Make sure ditches are clean and free from weeds, sediment, or other debris which can slow water velocity, affect delivery rate and increase evaporation.

Consider lining ditches with concrete or plastic. This could avoid the 10-90 percent loss which often occurs in ditches.

Make sure ditch structures — like headgates, drop structures, and pipe inlets — are strong and functional. A washed-out ditch structure could mean a lot of water lost.

Make sure ditchbanks are firm and not burrowed into by rodents. Rodent holes could cause leakage or failures.

Make sure your pump is operating at peak efficiency. Adequate maintenance will improve efficiency, guard against water loss, and avoid shutdowns.

SPRINKLER SYSTEMS

Make sure nozzles aren't worn and leaky. Check pipe connections and valves to prevent leaks.

Operate sprinklers at recommended pressure. Use application rate, efficiency factor and time of application to figure how much to apply.

Consider trickle systems for orchards, vineyards, etc. Operate at recommended design values and maintain the filter system.

IRRIGATION MANAGEMENT

Measure the amount of water applied to the field. This can indicate when and how much to irrigate.

Consider alternate row irrigation for crops planted in furrows. But remember to alternate the "alternate" row in later irrigations.

Consider shorter runs if you furrow irrigate. Match stream size and velocity to soil intake rate and capacity.

Consider catching and re-using tail water by pumping it back to the head of the system or re-using elsewhere.

Irrigate most crops when soil moisture reaches about 50 percent of capacity.



WATER CONSERVATION

TIPS

FOR STRETCHING

WATER FOR

YARDS AND GARDENS

OTHER PLACES FOR INFORMATION OR ASSISTANCE

Consult commercial nursery or garden suppliers for plant watering requirements and recommendations.

Check with your local Soil Conservation Service office, Conservation District officials, or Cooperative Extension Service office for details concerning your water conservation questions.



Surviving a Water Shortage Takes Good Management

What can be done to nurture trees, shrubs, lawns and gardens through a water-short year?

First, try to learn all you can about how much water will be available and what regulations might be put into effect.

Absorb all you can about relationships among soil, water and plants — especially your own.

Develop a plan for applying water based on supply, needs, alternatives and current conditions.

Observe and measure how your plan is working.

Those plant, water and soil relationships are crucial to success of your management plan.

Plants differ in how much water they need to survive or prosper — and this varies with climate and changing weather conditions.

Sprinklers and other devices for applying water vary in how fast they can deliver water.

And finally, soils differ in how fast they absorb moisture, how much they store and how long they retain it.

A rule of thumb says 1 inch of moisture will penetrate 12 inches deep in sandy soil; 7 inches in loam, and 4 to 5 inches in clay.

ALTERNATIVES

Save water for plants that can't survive without it.

Reduce watering of other plants to subsistence level. (Lawns can do without water for a long time and green up again when moisture is available.)

Don't plant annuals when water shortage is imminent.

If a vegetable garden is important, many perennials can do without water better than annuals can.

Hold up on new landscaping or consider desert or native plants.

If you were planning to remove any lawn, trees or shrubs in the future; this would be the year to do the work before you start watering.

Change your lawn and garden watering system. Try automatic, drip or different sprinkler heads for better efficiency.

APPLY WATER EFFICIENTLY

Water deep and less often. Shallow, frequent watering encourages shallow roots, more evaporation loss and reduces the moisture reservoir in the soil.

For best results check how long it takes to soak the entire root zone and how long this watering will last.

Don't apply water faster than soil can absorb.

Don't let water run off into street or driveway.

Water early in the day to reduce evaporation loss.

CONSERVE MOISTURE

Mulch around trees and shrubs and between garden rows. This holds in moisture, discourages weeds which compete for moisture.

Aerate your lawn to permit better water penetration.

Set your lawn mower blade to leave 2 or more inches of grass after mowing.

Fertilize adequately. A sick looking lawn or garden many need more fertilizer, not more water. Apply fertilizer before regular watering.

If it rains, reduce watering time accordingly. Measure how much rain has fallen, adjust watering schedule and duration accordingly.

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Utah State University
Utah State Department of Natural Resources
Division of Wildlife Resources
Division of Water Resources
Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

Federal

U.S. Department of Agriculture
Soil Conservation Service
Forest Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

Municipality

Manti
Salt Lake City

Public

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Central Utah Conservancy District
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association
Weber River Water Users Association
Weber Basin Conservancy District

Other organizations and individuals furnish
information for the snow survey reports.
Their cooperation is gratefully acknowledged.

All programs and services of U.S. Dept.
of Agriculture are available to everyone
without regard to race, creed, color, sex,
age, handicap, or national origin.